

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Previously Presented): An aluminum nitride powder comprising:
from 40 to 70% of coarse particles having a size of 3 to 15 μm ,
from 25 to 40% of medium particles having a size of 0.5 to 1.5 μm , and
from 0.5 to 20% of fine particles having a size of 0.3 μm or less,
the percentages being on a volume basis, and
wherein the aluminum nitride powder has an oxygen amount of from 0.5 to 1.5 mass%.

Claim 2 (Previously Presented): An aluminum nitride non-fired molded body comprising a molded body of a powder mixture comprising the aluminum nitride powder as defined in Claim 1 and a sintering aid.

Claims 3-5 (Canceled).

Claim 6 (Currently Amended): A process for producing [[the]] an aluminum nitride powder ~~according to Claim 1~~, comprising:

dispersively mixing a raw material aluminum powder having an average particle size of at most 40 μm and an oxygen amount of at most 0.5 mass% with a nitrogen gas in a proportion of at most 100 g per 1 Nm³ of the nitrogen gas,

atomizing the gas into a reaction tube for nitriding, and
collecting, ~~the product~~ in a collection system, the aluminum nitride powder, said
aluminum nitride powder comprising

from 40 to 70% of coarse particles having a size of 3 to 15 μm ,
from 25 to 40% of medium particles having a size of 0.5 to 1.5 μm , and
from 0.5 to 20% of fine particles having a size of 0.3 μm or less,
the percentages being on a volume basis,

and said aluminum nitride powder having an oxygen amount of from 0.5 to 1.5 mass%,

wherein the oxygen concentration at a portion at which the temperature will be at least 100°C in the reaction tube and the collection system is controlled to be at most 100 ppm, and the product is taken out at a temperature of at most 100°C.

Claim 7 (Original): The process according to Claim 6, wherein the formed aluminum nitride powder has a BET specific surface area of at least $10\text{ m}^2/\text{g}$ and a value of the oxygen amount (mass%)/the specific surface area (m^2/g) of from 0.1 to 0.2.

Claim 8 (Currently Amended): The aluminum nitride powder according to claim 1, wherein the coarse particles have a size of 5 to $10\text{ }\mu\text{m}$ and are present in an amount of from ~~50 to 60~~ 50 to 65 volume %.

Claim 9 (Previously Presented): The aluminum nitride powder according to claim 1, wherein the medium particles have a size of 0.8 to $1.3\text{ }\mu\text{m}$ and are present in an amount of from 25 to 35 volume %.

Claim 10 (Previously Presented): The aluminum nitride powder according to claim 1, wherein the fine particles have a size of 0.05 to $0.25\text{ }\mu\text{m}$ and are present in an amount of from 5 to 15 volume %.

Claim 11 (Currently Amended): The aluminum nitride powder according to claim 1, wherein the coarse particles have a size of 5 to $10\text{ }\mu\text{m}$ and are present in an amount of from ~~50 to 60~~ 50 to 65 volume %, the medium particles have a size of 0.8 to $1.3\text{ }\mu\text{m}$ and are present in an amount of from 25 to 35 volume %, and the fine particles have a size of 0.05 to $0.25\text{ }\mu\text{m}$ and are present in an amount of from 5 to 15 volume %.

Claim 12 (Previously Presented): The aluminum nitride powder according to claim 1, wherein the aluminum nitride powder has an oxygen amount of from 0.8 to 1.3 mass%.